

KHRAPOV, V.G., kand.tekhn.nauk

Span of the disturbed zone of horizontal circular excavations.

Trudy MIIT no.126:170-173 '60.

(MIRA 13:10)

(Tunneling)

ARKHANGEL'SKIY, A.S., kand. tekhn. nauk; VASIL'YEV, N.V., kand. tekhn. nauk; GORDIYENKO, B.I., inzh.; SAMOYLOV, V.P., kand. tekhn. nauk; TERENCEVSKIY, L.N., inzh. Prinimali uchastiye: DEMESHKO, Ye.A., inzh.; KUBENEV, Kh.K., kand. tekhn. nauk; SMORODINOV, M.I., kand. tekhn. nauk; KHRAPOV, V.G., kand. tekhn. nauk; NIKOL'SKIY, I.S., inzh.; KATKOV, G.A., inzh.; VORONTSOVA, N.D., starshiy laborant; BLAGOSLAVOV, Yu.B., kand. tekhn. nauk, nauchnyy red.; SMIRNOVA, A.P., red. izd-va; IGNAT'YEV, V.A., tekhn. red.

[Underground mining in loose rocks] Prokhodka podzemnykh vyrobok v sypuchikh porodakh. Pod obshchei red. A.S.Arkhangel'skogo. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1961. 205 p. (MIRA 14:11)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut osnovaniy i podzemnykh sooruzheniy. 2. Sotrudniki Laboratorii metodov vozvedeniya podzemnykh sooruzheniy Nauchno-issledovatel'skogo instituta osnovaniy Akademii stroitel'stva i arkhitektury SSSR (for all except Blagoslavov, Smirnova, Ignat'yev). (Mining engineering)

GROMOV, L.I., kand. tekhn. nauk; NIKOLAYEV, V.L., kand. tekhn. nauk;  
KHRAPOV, V.G., kand. tekhn. nauk

Crack resistance of concrete. Trudy MIIT no.191:144-151, '64.  
(MIRA 18:6)

KHIRAPOV, V. S.

Brain - Surgery

Role of the cerebral cortex and of subcortical parts of the brain in modification of arterial and pulse pressure following brain surgery. Vop. neirokhir. 17, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

KHRAPOV, V. S.

KHRAPOV, V. S. -- "Problem Concerning the Role of the Cortex and the Lower Divisions of the Brain in the Regulation of the Cardiovascular System." Sub 14 Jan 53, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva January February 1952

KHEAPOV, V.S.

Role of the cerebral cortex and of subcortical parts of the brain in modification of arterial and pulse pressure following surgery of the brain. Vopr. neirokhir. 17 no.1:40-47 Jan-Feb 1953.

(CLML 24:2)

1. Of the Clinical Division (Head -- Prof. L. A. Koreyska) of the Institute of Neurosurgery imeni Academician N. P. Burdenko (Director -- Prof. B. G. Yegorov, Corresponding Member AMS USSR), Academy of Medical Sciences USSR, Moscow.

KHRAPOV, V.S.

Role of negative induction in restoration of function  
in spinal cord. Vopr. neirokhir. 17 no.5:48-54  
Sept-Oct 1953.

(CJML 25:5)

1. Of the Institute of Neurosurgery imeni Academician  
N.N. Burdenko of the Academy of Medical Sciences USSR.

KHRAPOV, V.S.

Changes in the venous pressure following brain surgery.  
Probl. sovr.neirokhir. 2:33-38'57. (MIRA 16:6)  
(BRAIN—SURGERY) (BLOOD PRESSURE)



KHRAPOV, V.S.

Asymmetries in the venous pressure following brain surgery.  
Probl.sovr. neurokhir. 2:39-46'57. (MIRA 16:6)  
(BRAIN—SURGERY) (BLOOD PRESSURE)

МЕРЯПОВ, V.S.

Electrocardiographic changes following surgery on various parts of the brain. Vop.neirokhir. 21 no.4:34-40 Je-Ag '57. (MIRA 10:10)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni institut neyrokhirugii imeni akad. N.N.Burdenko Akademii meditsinskikh nauk SSSR.

(BRAIN, surgery,

postop. ECG (Rus))

(ELECTROCARDIOGRAPHY,

postop. in brain surg. (Rus))

MAYORCHIK, B.Ye.; KHRAPOV, V.S. (Moskva)

Registration of electrocortical reaction in man during operations  
on the spinal cord. Vop.neirokhir. 25 no.1:44-49 Ja '61.  
(MIRA 14:82)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni  
institut neyrokhirurgii imeni akad. N.N. Burdenko AMN SSSR.  
(SPINAL CORD—SURGERY) (CEREBRAL CORTEX)

MAYORCHIK, V.Ye.; KHRAPOV, V.S.

Electromyographic recording during spinal cord surgery in  
man. Biul. eksp. biol. i med. 53 no.5:3-7 My '62.

(MIRA 15:7)

1. Iz Nauchno-issledovatel'skogo instituta neurokhirurgii  
imeni akademika N.W. Burdenko AMN SSSR, Moskva. Predstavlena  
deystvitel'nym chlenom AMN SSSR B.G. Yegorovym.

(SPINAL CORD SURGERY) (ELECTROMYOGRAPHY)

ARENDET, A.A., prof.; ARKHANGEL'SKIY, V.V., kand. med. nauk; BOGDANOV, F.R., prof.; BONDARCHUK, A.V., prof.; KOPYLOV, M.B., prof.; KORNEV, P.G., zasl. deyatel' nauki RSFSR, prof.; KUSLIK, M.I., prof.; LEYBZON, N.D., doktor med. nauk; MAKAROV, M.P., kand. med. nauk; NIKOL'SKIY, V.A., prof.; PODGORNAYA, A.Ya., doktor med. nauk; RAZDOL'SKIY, I.Ya., prof. [deceased]; ROSTOTSKAYA, V.I., kand. med. nauk; TUMSKOY, V.A., kand. med. nauk; UGRYUMOV, V.M., prof.; FISHKIN, V.I., kand. med. nauk; KHRAPOV, V.S., kand. med. nauk; CHIKOVANI, K.P., prof. [deceased]; ~~NIKOL'SKIY, A.A., prof.~~; PETROVSKIY, B.V., prof. zasl. deyatel' nauki RSFSR, otv. red.; YEGOROV, B.G., zasl. deyatel' nauki RSFSR prof., red. toma; MIRONOVICH, N.I., doktor med. nauk, zam. red.; PARAKHINA, N.L., tekhn. red.

[Manual on surgery] Mnogotomnoe rukovodstvo po khirurgii. Moskva, Medgiz. Vol.4. [Neurosurgery; the sequelae of lesions of the central nervous system. Diseases of the spine, the spinal cord and its membranes. Diseases of the vegetative nervous system] Neirokhirurgiya; posledstviya povrezhdenii tsentral'noi nervnoi sistemy. Zabolevaniya pozvonochnika, spinного mozga i ego obolochek. Zabolevaniya vegetativnoi nervnoi sistemy. 1963. 667 p. (MIRA 16:10)

1. Deystvitel'nyy chlen AMN SSSR (for Petrovskiy, Yegorov, Kornev). 2. Chlen-korrespondent AMN SSSR (for Bogdanov).  
(NERVOUS SYSTEM—SURGERY) (SPINE—SURGERY)



S/056/62/043/003/014/063  
B102/B104

AUTHORS: Gol'danskiy, V. I., Khrapov, V. V.

TITLE: Comparison of the effect of electron irradiation on the optical activity of racemates and optical antipodes

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 3(9), 1962, 823-827

TEXT: The literature contains contradictory statements as to the effect of electrons (from  $\beta$ -decay or accelerated) on mirror isomers (antipodes). Therefore the authors studied carefully the electron irradiation effects on solid racemates and separated forms of optical isomers. 22 forms of 14 organic compounds (as  $C_{20}H_{24}N_2O_2$ ) were irradiated by 1)  $\beta$ -electrons from  $Rh^{104}$  (produced in an  $WPT-1000$  (IRT-1000) reactor with a neutron flux of  $5 \cdot 10^{11}$  -  $5 \cdot 10^{12}$ ;  $Rh^{104}$  activity 20-200 curies,  $\beta$ -dose 150-15000 Mrad); 2) electrons accelerated at the microtron of the IFP AN SSSR (6.5 Mev, 1-4  $\mu$ a, beam diameter 6 mm; dose 50-500 Mrad); 3) electrons accelerated by a cascade accelerator of the IKhF AN SSSR (1.5 Mev, 0.5-1  $\mu$ a, beam

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Comparison of the effect of...

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B102/B104

diameter 5 mm, 30-250 Mrad). In the latter experiments the target was kept at  $-196^{\circ}\text{C}$ . In almost all experiments the target was placed in a magnetic field (3200 oe) perpendicular to the electron beam direction. No optical activity of the irradiated racemates or difference in the action of irradiation on the optical antipodes was observed in any of the cases investigated. All changes fell within the accuracy limits of measurement. A very weak reduction in optical activity of quinine and quinidine could be observed only in the experiments mentioned under (3).

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR)

SUBMITTED: April 12, 1962

Card 2/2



KHRAPOV, V. V.

S/020/62/147/001/018/022  
B101/B144

AUTHORS: Gol'danskiy, V. I., Corresponding Member AS USSR, Gorodinskiy, G. M., Karyagin, S. V., Korytko, L. A., Krishanskiy, L. M., Makarov, Ye. P., Susdalev, I. P., Khrapov, V. V.

TITLE: Investigation into the Mössbauer effect in tin compounds

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 1, 1962, 127 - 130

TEXT: The Mössbauer effect in the symmetrical compounds  $\text{SnCl}_4$ ,  $\text{SnBr}_4$ ,  $\text{SnI}_4$ ,  $\text{Sn}(\text{C}_6\text{H}_5)_4$  and  $\text{SnO}_2$  and in the asymmetrical compounds  $\text{Ph}_3\text{SnHal}$  ( $\text{Ph} = \text{C}_6\text{H}_5$ ,  $\text{Hal} = \text{F}, \text{Cl}, \text{Br}, \text{I}$ ) was studied using an apparatus in which the absorber moved uniformly with respect to the source and an apparatus with sinusoidal movement.  $\beta$ -Sn or  $\text{SnO}_2$  were used as sources of the 23.8-kev gamma-quanta ( $\text{Sn}^{119\text{m}}$ ). With the symmetrical compounds the chemical shift  $\delta$  of the absorber lines with respect to  $\beta$ -Sn, expressed in mm/sec ( $1\text{mm/sec} = 7.9 \cdot 10^{-6} \text{ ev}$ ), was a linear function of the electronegativity of the atoms bound to Sn. The equation  $\delta = 1.6 \cdot 10^{-29} [\psi_s(0)]^2_{\text{absorb}} - [\psi_s(0)]^2_{\text{emit}}$  mm/sec  
Card 1/5

Investigation into the...

S/020/62/147/001/018/022  
B101/B144

given by A. J. F. Boyle, D. S. P. Bunbury, C. Edwards (Proc. Phys. Soc., 79, 416(1962)) and the data on the ionicity of the Sn-Hal bonds, obtained by the method of A. L. Schawlow (J. Chem. Phys., 22, 1211 (1954)) and those of M.M. Yakshin et al. (ZhNKh, 6, 2425(1961)) on refraction and dielectric constant give  $\delta_{\text{ion}} = -(5.6 \pm 0.5) \text{ nm/sec} = -(4.4 \pm 0.4) \cdot 10^{-7} \text{ ev}$ ,

$\Delta R/\bar{R}(\text{Sn}^{119}) = +(1.9 \pm 0.2) \cdot 10^{-4}$  for a completely ionized bond. These data enable  $|\psi_{5s}(0)|^2$  to be determined directly from  $\delta$ . In the asymmetrical compounds, asymmetrical doublets were observed (Fig. 2) similar to those found by Boyle et al. in  $\text{SnF}_4$ . The asymmetry was found also in dissolved compounds and cannot be explained by a random orientation of the crystals in the direction of the gamma quanta or by ferromagnetic or paramagnetic impurities. From the equation

$$\frac{C_{10 \text{ total}}}{C_{10 \text{ total}}} = \frac{\int_{-1}^{+1} [2\sqrt{5}P_0(\cos\theta) + P_2(\cos\theta)] / (\cos\theta) d\cos\theta}{\int_{-1}^{+1} [2\sqrt{5}P_0(\cos\theta) - P_2(\cos\theta)] / (\cos\theta) d\cos\theta} \quad (3)$$

where the subscript total = total,  $P_L(\cos\theta)$  is the normalised Legendre  
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Investigation into the...

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polynomial,  $f(\cos\theta) = \sum a_k P_k(\cos\theta)$  is the factor determining the intensity of the Mössbauer line,  $a_k$  the decay coefficient, it follows that if

$\sigma_{11}^{\text{tot}}/\sigma_{11}^{\text{tot}} = (2\sqrt{5}a_0 + a_2)/(2\sqrt{5}a_0 - a_2) \neq 1$  (with  $a_2 \neq 0$ ) and  $-2\sqrt{5} < a_2/a_0 < 2\sqrt{5}$ , each of the peaks of the Mössbauer doublet may become

higher than the other one according to the ratio  $a_0/a_2$ . This ratio can be

determined experimentally. Assuming a quadrupole splitting of the Mössbauer line in  $\text{SnP}_4$  and  $\text{Ph}_3\text{SnHal}$ ,  $q = 6.9 \cdot 10^{18} \text{ x v/cm}^2$  is obtained where

$q = e^2 v / \partial s^2$  is the gradient of the electric field in the region of the  $\text{Sn}^{119}$

nucleus, and  $x$  is the degree of ionisation of the bond. For  $\text{Ph}_3\text{SnHal}$

$x \approx 0.55$  with  $\text{Hal} = \text{I}$ ;  $x \approx 0.7$  with  $\text{Hal} = \text{Br}$ ;  $\text{Cl}$  and  $x \approx 1$  with  $\text{Hal} = \text{F}$ .

Another possible interpretation of the asymmetrical splitting might be the different hybridisation of the  $sp^3d^2$  bonds. In order to explain this problem it is suggested that the effective charges of the halogen and tin atoms be determined directly. When an equimolecular mixture of  $\text{SnPh}_4$  and

$\text{SnI}_4$  was irradiated with 1.6-Mev electrons the Mössbauer spectrum was

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Investigation into the...

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observed to be greatly changed through the spectra of various disproportionation products  $\text{Ph}_4\text{SnI}_{4-1}$  being superimposed. Hence it is concluded that the Mossbauer effect can be used not only to study the chemical structure but also to solve problems of chemical kinetics and radiation chemistry. There are 2 figures.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR)

SUBMITTED: July 21, 1962

Card 4/5

KHRAPOV, V. V., MAKAROV, E. F., GOL'DANSKII, V. I.,

"Structural Studies of Tin-Organic Carboxylates, Polymer Tin-Organic Oxides and Related Compounds by the Mossbauer Effect,"

report presented at the 3rd Intl. Conf. on the Mossbauer Effect, Cornell, Univ., New York, 4-7 Sep 63

S/056/63/044/002/054/065  
3163/3186

AUTHORS: Gol'danskiy, V. I., Makarov, Ye. F., Khrapov, V. V.  
TITLE: The difference of the two peaks in the quadrupole splitting of Mössbauer spectra  
PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 2, 1963, 752-755

TEXT: In stanno-organic compounds such as triphenylchlorostannane  $\text{Sn}(\text{C}_6\text{H}_5)_3\text{Cl}$ , an asymmetry in the peaks of the doublet splitting of the Mössbauer spectra was found. It is shown that the quadrupole splitting of the Mössbauer spectra of isotropic polycrystalline specimens generally gives peaks of different shape and height, and that these peaks are equal only in the special case of the isotropic Mössbauer effect. This means that the asymmetry can be explained without assuming the presence of two different chemical compounds, and that it occurs even in isotropic polycrystalline specimens as a direct consequence of the anisotropy of the Mössbauer effect. In order to test this view the asymmetry of the two Mössbauer peaks was studied in relation to the degree of orientation of

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The difference of the two peaks in ...

S/056/63/044/002/054/065  
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triphenylchlorostannane crystals and for two different angles of orientation of the specimen with respect to the direction of the beam of  $\gamma$  quanta. Cryoscopic determination of the molecular weight in benzene and camphor showed that there was no molecular association. The measurements were made at 78°K with the IKhF AN SSSR instrument with a  $\text{SnO}_2$

source. Isotropic specimens were prepared as layers of finely ground powder on an aluminum substrate. Other anisotropic specimens were prepared by melting and subsequent slow cooling on an aluminum substrate, in order to obtain coarsely crystalline lamellae, preferentially oriented along the substrate. The isotropic as well as the anisotropic specimens were oriented at angles of 90° and 45°, respectively, with respect to the beam of  $\gamma$  quanta. With the isotropic specimen, the asymmetric spectrum was the same for both angles. At 90°, the shape of the spectrum of the anisotropic specimen is different from that of the isotropic specimen. This excludes the possibility of an explanation of the difference of the two peaks by the assumption that singlet lines of two different chemical compounds are superimposed. If the anisotropic specimen is turned to 45°, there is again a change in the spectrum. The experimental results

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The difference of the two peaks in ...

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are considered to give evidence for the view stated above. There is 1 figure.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR)

SUBMITTED: November 12, 1962

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L 13829-63

Pr-4 RM/WW/JD

EWP(j)/EPF(c)/EWT(1)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pc-4/

ACCESSION NR: AP3003557

S/0020/63/151/002/0357/0360

75  
74

AUTHOR: Gol'danskiy, V. I. (Corr. member, AN SSSR); Makarov, Ye. F.; Stukan, R. A.; Trukhtanov, V. A.; Khrapov, V. V.

TITLE: Analysis of the structure of polymeric organo-tin oxides  $R_2 SnO$  by Mossbauer effect

SOURCE: AN SSSR. Doklady\*, v. 151, no. 2, 1963, 357-360

TOPIC TAGS: Sn, Mossbauer effect

ABSTRACT: New assumptions are proposed on the structure of  $R_2 SnO$  organo-tin molecules, based on the presentation of the results of the Mossbauer effect, investigations in these oxides and related compounds. The Mossbauer spectra for all these compounds consist of two lines. Also the probability of the Mossbauer effect for some  $R_2 SnO$  organo-tin oxides is investigated. "In conclusion, the authors express their sincere gratitude to Ye. M. Panov, O. A. Ptitsy\*na, and N. I. Sheverdina for submitting preparations of tin-organic compounds." Orig. art. has: 2 figures, 5 formulas, and 1 table.

Card 1/2/

*Inst. of Chemical Physics, Academy of Sci.*

ABLOV, A.V., akademik; BELOZERSKIY, G.N.; GOL'DANSKIY, V.I.; MAKAROV, Ye.F.;  
TRUKHTANOV, V.A.; KHRAPOV, V.V.

Mössbauer's spectra of complex compounds of iron with  
diacetylthiosemicarbazone oxime. Dokl. AN SSSR 151 no.6:1352-1355  
Ag '63. (MIRA 16:10)

1. Institut khimicheskoy fiziki AN SSSR i Institut khimii AN  
Moldavskoy SSR. 2. AN Moldavskoy SSR (for Ablov). 3. Chlen-  
korrespondent AN SSSR (for Gol'danskiy).

GOL'DANSKIY, V.I.; ROCHEV, V.Ya.; KHRAPOV, V.V.

Mossbauer effect in organic compounds of bivalent tin. Dokl.  
AN SSSR 156 no. 4:909-911 Je '64. (MIRA 17:6)

1. Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent  
AN SSSR (for Gol'danskiy).

GOL'DANSKIY, V.I.; MAKAROV, Ye.F.; STUKAN, R.A.; SUMAROKOVA, T.N.;  
TRUKHTANOV, V.A.; KHRAPOV, V.V.

Particular features of the Mössbauer effect for tin compounds with coordination number 6. Dokl. AN SSSR 156 no. 2: 400-403 My '64. (MIRA 17:7)

1. Institut khimicheskoy fiziki AN SSSR. 2. Cheln-korrespondent AN SSSR (for Gol'danskiy).

L 10706-65 EWT(m)/EPF(c)/EWP(1) PC-4/Pr-4 AFWL/AS(mpl)-2/BAEM(a)/  
AEDC(a7/SSD/ESD(gs)/ESD(t)/ASD(m))-3 RM

ACCESSION NR: AP4041159

S/0020/64/156/004/0909/0911

AUTHOR: Gol'danskiy, V. I. (Corresponding member AN SSSR); Rochev, V. Ya.;  
Khrapov, V. V.

TITLE: Mossbauer effect in organic compounds of divalent tin

SOURCE: AN SSSR. Doklady\*, v. 156, no. 4, 1964, 909-911

TOPIC TAGS: Mossbauer molecular spectroscopy, Mossbauer effect, organotin compound, divalent organotin compound, diphenyltin, dibutyltin, tetraphenyltin, tetrabutyltin, hexaethyl-distannane, dibutyltin oxide, oxidation kinetics, chemical shift, Debye Waller factor, Sn Sn bond, Sn C bond

ABSTRACT: The Mossbauer spectra of the absorbers diphenyltin and dibutyltin were investigated. The spectra were obtained with the absorbers at liquid nitrogen temperatures and the emitter  $\text{Sn}^{119}\text{mO}_2$  at room temperature by the method described by V. I. Gol'dansky, Ye. F. Makarov i dr., DAN, 151, 357 (1963)). The values for the chemical shift in these divalent and analogous tetravalent organotin compounds were determined:  $\delta$  (mm/sec) for  $(\text{Ph}_2\text{Sn})_n$  1.42,  $(\text{Bu}_2\text{Sn})_n$  1.55,  $\text{Bu}_4\text{Sn}$  1.35,  $\text{Ph}_4\text{Sn}$  1.35 and  $\text{Et}_3\text{Sn-SnEt}_3$  1.45. The similarities in these values indicates the presence of Sn-Sn and Sn-C bonds. The changes in the Mossbauer spectra of  $(\text{Bu}_2\text{Sn})_n$  during

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L 10706-65

ACCESSION NR: AP4041159

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its oxidation were recorded. On oxidation a doublet is formed with the spectrum identical to that of  $(\text{Bu}_2\text{SnO})_n$ . The position of the singlet line of the initial  $(\text{Bu}_2\text{Sn})_n$  coincides with one of the lines of the  $(\text{Bu}_2\text{SnO})_n$ , the Debye-Waller factor for  $(\text{Bu}_2\text{SnO})_n$  approximately twice that of the unoxidized compound. On oxidation the position and length of one of the lines remains practically unchanged while the length of the second line, proportional to the Mossbauer effect, increases proportionally to the oxidation of the  $(\text{Bu}_2\text{Sn})_n$ . This can be used to construct the kinetic curve for  $(\text{Bu}_2\text{Sn})_n$  oxidation. The possibility of applying Mossbauer molecular spectroscopy to the investigation of the structure and kinetics of the transformation of organotin compounds is thus confirmed. "The authors thank N. S. Vyazankin for supplying samples of  $(\text{Bu}_2\text{Sn})_n$  and  $\text{Et}_6\text{Sn}$  and Ye. F. Makarov, R. A. Stukan and V. A. Trukhtanov for discussions." Orig. art. has: 1 table, 1 figure and 2 equations.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physico Academy of Sciences SSSR).

SUBMITTED: 26Feb64

ENCL: 00

SUB CODE: 00, NP

NO REF SOV: 005

OTHER: 004

Corr 2/2

ALEKSANDROV, A.Yu.; BREGADZE, V.I.; GOL'DANSKIY, V.I.; ZAKHARKIN, L.I.;  
OKHLOBYSTIN, O.Yu.; KHRAPOV, V.V.

Organotin derivatives of barones studied by means of Mössbauer  
spectroscopy. Dokl. AN SSSR 165 no.3:593-596 N '65.

(MIRA 18:11)

1. Institut khimicheskoy fiziki AN SSSR i Institut elemento-  
organicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent  
AN SSSR (for Gol'danskiy).

1ST AND 2ND GROUPS		PROCESSES AND PROPERTIES INDEX	
<p><i>Co</i></p> <p><b>Rapid determination of copper as cuprous thiocyanate.</b>  A. G. Kul'man and G. A. Khrapov-Shmarov. <i>Zavodskaya Lab.</i> 7, 200-5 (1958).—Cu can be detd. as CuSCN by the Rivot method (<i>Compt. rend.</i> 30, 1618 (1854)) in about 20 min. by carrying on all the operations of reduction with SO<sub>2</sub>, pptn. with NH<sub>4</sub>SCN and washing of the ppt. by extn. with alc.-Et<sub>2</sub>O in the same Buchner funnel. The Kuhlmann and Gershen extractor is used (cf. C. A. 30, 7895). The procedure and app. are described. Chas. Blanc  Thirty references.</p>			
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>			
100000 1ST GRP DEL		100000 2ND GRP DEL	
100000 3RD GRP DEL		100000 4TH GRP DEL	



KUDRYAVTSOV, Aleksandr Andreyevich; KHRAPOV-SHMAROV, Georgiy Alekseyevich; DMITRIYENKO, G.V., redaktor; ~~VILKOVSKIY~~, Ye.A., tekhnicheskiiy redaktor.

[Oxidation-reduction reaction.] Okislitel'no-vosstanovitel'nye reaktsii. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniya RSFSR, 1954. 101 p. (MIRA 8:3)  
(Oxidation-Reduction reaction)

L 22902-66 EWT(m)

ACC NR: AP5025869

SOURCE CODE: UR/OC20/65/164/004/0934/0936

AUTHOR: Burlakova, Ye. B.; Gaintseva, V. D.; Slepukhina, L. V.;  
Khrapova, N. G.; Emanuel', N. M. (Corresponding Member AN SSSR)

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B

ORG: none

TITLE: Relationship between the radiation protective and antitumoral  
action of inhibitor-antioxidants

SOURCE: AN SSSR. Doklady, v. 164, no. 4, 1965, 934-936

TOPIC TAGS: radiobiology, radiation protection, radiation sickness,  
radiation biologic effect, carcinoma, alkylphenol, phenol, amine,  
organic nitrogen compound, mouse

ABSTRACT: The radiation protective, antitumorigenic and radiosensiti-  
zing properties of a number of inhibitors were determined. Protection  
against radiation shown by 4-methyl-2,6-diteritary butylphenol, as  
determined by survival of mice after exposure to 550 r radiation, was  
maximum at injections of  $C = 50 \text{ mg/kg}$ . At  $C = 100 \text{ mg/kg} = C_{\text{negative}}$ ,  
the mortality rate equaled that of the control; dosages in excess  
of  $C_{\text{negative}}$  were considered radiosensitizing. The behavior of all the  
inhibitors studied--polyphenols, substituted hydroxypyridines,

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L 22902-56

ACC NR: AP5025869

aminophenols and a stabilized free radical--was qualitatively similar. A linear relationship between the antitumorigenic and radiation protective action of the antioxidants was established in a study of the function of leucosis development retardation with respect to the dosage Ctherapeutic/Cnegative. This leads the way to determining conditions for using inhibitors for suppressing tumorigenic processes and in experimental radiation sickness. Orig. art. has: 1 table, 2 figures and 12 formulas.

SUB CODE: 06/ SUBM DATE: 04Mar65/ SOV REF: 007/

Card 2/2 BKG

KHRAPKOVA, N.V.

Concentrations of commercial fishes and fish plankton in Kamchatka  
Gulf. Trudy Inst.ocean. 43:295-308 '61. (MIRA 14:6)  
(Kamchatka Gulf—Fishes)

KNEREL', G.M.; LERNER, Ya.N.; POZDEYEV, V.I.; POPOV, V.A.; REZNIK, M.Ya.;  
REYFER, Ya.A.; SKACHKOV, A.I.; STEPANOV, M.N.; KHAL'TUNEN, V.V.;  
KHRAPOVA, Ye.I.; SHREDER, B.L.; STERTSER, O.N.; AVRUSHCHENKO, R.A.,  
red.; KONYASHINA, A.D., tekhn.red.

[Fifty years of the Leningrad tramway] 50 let leningradskogo  
tramvaia. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1957. 231 p.  
(MIRA 11:1)

(Leningrad--Street railways)

BURLAKOVA, Ye.B.; GAIKSEVA, V.D.; SLEPUKHINA, L.V.; KHRAPOVA, N.G.;  
EMANUEL', N.M.

Antiradical activity and radioprotective properties of the inhibitors  
of free radical reactions. Dokl. AN SSSR 155 no.6:1398-1400 Ap  
'64. (MIRA 17:4)

1. Chlen-korrespondent AN SSSR (for Emanuel').

L 24209-65 EWT(1)/EWT(m)/T-2/EWP(h) RM

ACCESSION NR: AF4034040

S/0020/64/155/006/1398/1400

AUTHOR: Burlakova, Ye. B.; Gaintseva, V. D.; Slepukhina, L. V.; Khrapova, N. G.; Emanuel', N. M. (Corresponding member)

TITLE: Antiradical activity and radiation-protective effect of inhibitors of free-radical reactions

SOURCE: AN SSR. Doklady\*, v. 155, no. 6, 1964, 1398-1400

TOPIC TAGS: antiradical activity, radiation effect, radiation protection, free radical, free radical reaction, antioxidant, alkylated phenol derivative, alkylated amine derivative, arylated amine derivative, alkylated aminoalkylpyridine derivative

ABSTRACT: Earlier work on this effect in protecting mice against lethal radiation is cited. The present work aimed at establishing the relation between the activity of nontoxic doses of these inhibitors and survival of the animals, expressed as antiradical activity A, as product of its relative effectiveness &

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ACCESSION NR: AP4034040

(chemical) and concentration  $c$ :  $A = \epsilon C$ . The tests were conducted on 1526 mice irradiated with lethal doses, treated with one of 9 preparations injected intra-abdominally 15-45 minutes before irradiation. Their structural formulas, value  $\epsilon$  and survival rate of the mice so treated are tabulated. These chemicals have in common the ability to accept free radicals. The antiradical activity is graphed and presents a simple linear function (up to 60% survival).  $A$  depends either on  $\epsilon$  or on the toxicity of the agent, so that the concentration of the latter can be increased. The ratio of optimal radiobiological dose to maximal tolerance varies considerably; it is 1 for some, often considerably lower. For 2, 4-di-tert-butyltoluene the optimal dose was 50 mg/kg while 100 mg/kg results in zero survival; the maximal tolerated dose is 400 mg/kg [sic]. For 3-oxy-2,4-di-trimethylpyridine (64% survival rate) the optimum is 200 mg/kg, maximum tolerated 250 mg/kg. Thus, not only relative effectiveness and maximal tolerated dose, but also a value characterizing the reactive ability and toxicity of the accumulated radicals from the inhibitor ( $R' + HIn \rightarrow RH + In$ )

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ACCESSION NR: AP4034040

7  
have to be considered in such experiments. It is concluded that the inhibitors tested are promising radiation-protective substances. "The authors wish to thank I. S. Belostotska, A. A. Volod'kin, K. M. Dyumaev, A. I. Zlobin, V. V. Ershov, G. A. Nikiforov, L. D. Smirnov who synthesized the compounds used in this work." Orig. art. has: 1 table and 1 figure

ASSOCIATION: none

SUBMITTED: 02Aug63

ENCL: 00

SUB CODE: LS, Gc

NO REF SOV: 005

OTHER: 003

Card 3/3

EMANUEL', I.B.; GALITSOVA, V.D.; SLEPCHENKO, I.V.; KHRAPOVA, N.G.; EMANUEL',  
I.B.

Relation between the radioprotective and antitumor effects  
of inhibitor-antioxidants. Dokl. AN SSSR 164 no.4:934-936 0  
165.

(MIRA 18:10)

1. Ch en-korrespondent AN SSSR (for Emanuel').

KARNAUKHOV, A.P.; KISELEV, A.V.; KHRAPOVA, Ye.V.; DUBININ, M.M., akademik.

Adsorption of nitrogen vapors on carbon black. Dokl. AN SSSR 92 no.2:361-364  
S '53. (MLRA 6:9)

1. Akademiya nauk SSSR (for Dubinin). 2. Moskovskiy gosudarstvennyy universitet  
im. M.V. Lomonosova (for Karaukhov, Kiselev and Khrapova).  
(Carbon black) (Adsorption) (Nitrogen)

KARNAUKHOV, A.P.; KISELEV, A.V.; KHRAPOVA, Ye.V.

Nature of the adsorption of nitrogen vapors on quartz and  
silica gels. Dokl. AN SSSR 94 no.5:915-918 P '54. (MLRA 7:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
Predstavleno akademikom M.M.Dubininym.  
(Adsorption) (Nitrogen) (Silica)

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722320008-7

KHRAPOVA, E.V.

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722320008-7"

Distr:  
LEL

✓ The effect of the pore dimensions and the hydration of the surface of silicas on the adsorption of nitrogen vapor. A. V. Kiselev and E. V. Shtrikman, *Kolloid Zh.* 19 (1957), cf. preceding abstr. The adsorption of nitrogen (mole/sq. m.) of  $N_2$  at  $-195^\circ$  was raised from the experimental values by the use of the B.E.T. theory and a const. value for the cross-section of  $N_2$  being assumed. The  $a$  was equal for 3  $SiO_2$  gels the pore necks of which were wider than 38 Å., but was too great at small relative pressures  $p/p_0$  (below 0.1) and too small at  $p/p_0 = 0.1$  for a gel (1) of pore neck 24 Å. The  $a$  for quartz, considered as a porous  $SiO_2$  gel, was much greater than that calculated by the B.E.T. theory at  $p/p_0 < 0.01$ , especially at  $p/p_0 = 0.001$ . The  $a$  on quartz (previously found in liquid nitrogen) was greater (e.g., 8) when it was dried at  $20^\circ$  than in the adsorption expt. than when the drying temp. was  $400^\circ$  (e.g., 5 at  $p/p_0 = 0.01$ ). A similar effect of the pretreatment temp. on the  $a$  of gel I was noticeable at  $p/p_0 < 0.0001$  only. The  $a$  on  $SiO_2$  made by decomposition of  $SiO_2$  compounds was, e.g., for  $p/p_0 = 0.0001$  3, 6.5, and 4.3 when the gel was unaged, hydrated in vapor, or hydrated in liquid  $H_2O$  resp., and the difference was even more pronounced at  $p/p_0 < 0.001$ . At  $p/p_0 < 0.0001$  the  $a$  on hydrated quartz was smaller than on  $BaSO_4$  and greater than on graphite, whereas at  $p/p_0 = 0.5$  the order was graphite  $>$   $BaSO_4$   $>$  quartz.

ИЗРАПОВА, Ye.V., Cand Chem Sci--(diss) "On the effect of the structure  
and nature of the <sup>(complex of the)</sup>adsorbent ~~on~~ the adsorption of nitrogen vapors."  
Mos, 1958. 16 pp (Mos State U im M.V.Lomonosov. Chem Faculty), 100 co-  
pies. List of author's works at end of text. (R1,49-58,121)

-17-

*A. KHRAPOVA*  
AUTHORS:

Kiselev, A.V., Khrapova, Ye. V.,

62-58-4-2/32

TITLE:

Adsorption of Nitrogen Vapors on Graphitized Carbon Blacks and Charcoals (Adsorbtsiya parov azota na grafitirovannykh sazhakh i ugle)

PERIODICAL:

Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1958, Nr 4, pp. 389 - 402 (USSR)

ABSTRACT:

In papers already published (References 1-4) the advantages of work with carbon black compared to other working methods (with active charcoal and graphites) was pointed out. The variety and surface roughness of carbon blacks can be essentially decreased by means of thorough heating (at high temperatures). In this an enlarging of the crystallites in carbon blacks is caused and the surfaces become more homogenous. The works of the authors contain many investigations dealing with the adsorption and the differential heat of adsorption of various vapors as well as of the adsorption of solutions on carbon black (References 1-4, 10 - 17, 18, 19). In this paper the authors deal with the investigation of the adsorption of nitrogen vapors on various samples of original

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2



62-58-4-2/32

Adsorption of Nitrogen Vapors on Graphitized Carbon Blacks and Charcoals

and graphitized carbon blacks as well as of charcoal. By annealing the carbon blacks their rough surface was remarkably homogenized. The annealing of charcoal on the same conditions causes the destruction of part of the pores which leads to an essential decrease of the pore size. The isothermal line of the adsorption of nitrogen vapors on charcoal increases more rapidly than on carbon black. The isothermal lines of the adsorption of krypton and methane vapors on graphitized substances with homogenous surface show a step-form below the critical temperature of the adsorption layer. Above the critical point the isothermal lines do not show a break and keep their wave character. There are 11 figures, 1 table, and 47 references, 22 of which are Soviet.

Card 2/18  
✓

*Moscow State Univ. in M.V. Lomonosov  
Inst. Phys. Chem. AS USSR*

SOV-69-58-4-8/18

AUTHORS: Kiselev, A.V., Kovaleva, N.V., Sinitsyn, V.A., Khrapova, Ye.V.

TITLE: Adsorbate-Adsorbate Interactions in Vapor Adsorption on Graphitized Carbon Blacks (Proyavleniye vzaimodeystviya adsorbat-adsorbat pri adsorbtsii parov na grafitirovannykh sazhakh)  
2. Application of Adsorption Isotherm Equations for Description of Experimental Data (2. Primeneniye uravneniy izoterm adsorbtsii dlya opisaniya eksperimental'nykh dannykh)

PERIODICAL: Kolloidnyy zhurnal, 1958, Vol XX, Nr 4, pp 444-455 (USSR)

ABSTRACT: In the article, the equations of Reference 1 for the isotherms of mono- and polymolecular adsorption of vapors are applied to the description of the experimental isotherms of adsorption on graphitized carbon black. The adsorption of n-alkanes is described by the isotherm equations 1 and 4, which are similar to the equations of Langmuir and Brunauer-Emmett-Teller. The isotherm of cycloheptane adsorption has two inflexion points and is described by equation 4. The experimental isotherms and adsorption heats of nitrogen, argon, and krypton vapors on the carbon black R-33, graphitized at 2,700° C. At a tempera-

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SOV-69-58-4-8/18

Adsorbate-Adsorbate Interactions in Vapor Adsorption on Graphitized Carbon Blacks. 2. Application of Adsorption Isotherm Equations for Description of Experimental Data

ture of  $-183^{\circ}\text{C}$ , the pure initial adsorption heat is 0.8 kcal/mole. It has been found that the adsorption isotherms follow for values  $\theta < 0.1$  the equation of Henry, from 0.1-0.5 the equation of Hill (2) and for higher values the equation of Langmuir.  $\theta$  is the general degree of filling of the surface by the monolayer. Figure 1 shows that the adsorption isotherms for nitrogen vapors calculated according to Hill's equation coincide with the experimental values only to  $\theta = 0.4$  and then incline downward. The Langmuir equation is applied for higher values. Figure 4 shows the adsorption heats of argon vapors and the adsorption isotherms calculated according to the equations 1 and 2. The pure initial adsorption heats amount to 0.7 kcal/mole. Figure 5 represents the experimental adsorption isotherms of krypton vapors at  $-183^{\circ}\text{C}$  and  $-195^{\circ}\text{C}$  from Reference 13 as well as the calorimetric adsorption heats at  $-183^{\circ}\text{C}$  from Reference 15. The pure initial adsorption heat is 1.5 kcal/mole. It has been found that equation 3 corresponds well to the experimental data. Figure 7 shows the

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SOV-69-58-4-8/18

Adsorbate-Adsorbate Interactions in Vapor Adsorption on Graphitized Carbon Blacks. 2. Application of Adsorption Isotherm Equations for Description of Experimental Data

adsorption isotherms for nitrogen, argon, and krypton vapors at high vapor pressure values. In the case of nitrogen and argon at these values, polymolecular adsorption sets in. Equation 4 gives good results for nitrogen. For argon, the calculated values are higher. The adsorption isotherms of krypton have a step-shaped character. Equation 4 is used. Figure 8 shows the isotherm and the adsorption heat for  $\text{SO}_2$  vapors at  $0^\circ \text{C}$  on carbon black sferon-6 graphitized at  $2,700^\circ \text{C}$ . The pure initial adsorption heat is approximately equal to the condensation heat and reaches a maximum of 1.5 kcal/mole at a vapor pressure of 0.2. The experimental facts are well described by the equations 1 and 2. Figure 11 shows the isotherms and the adsorption heats for ammonia at  $-78.8^\circ \text{C}$  and methylamin at  $0^\circ \text{C}$ . The ammonia isotherm has no inflexion point, whereas the methylamin isotherm has two inflexion points. Equation 4 and Hill's equation are applied to the experimental data. It has been established, that in the same measure as the adsorbate-adsorbent interactions decrease and the adsorbate-

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SOV-69-58-4-8/18

Adsorbate-Adsorbate Interactions in Vapor Adsorption on Graphitized Carbon Blacks. 2. Application of Adsorption Isotherm Equations for Description of Experimental Data

adsorbate interactions relatively increase, the isotherms change their shape from convex at the initial part with single points of inflexion (n-alkanes) to initially concave, with two points of inflexion (nitrogen, argon, krypton, sulfur dioxide, methylamin, etc.) and to concave throughout with no inflexion (water).

There are 12 graphs, 1 table, and 29 references, 14 of which are Soviet and 15 English.

ASSOCIATIONS: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova, Laboratoriya adsorbtsii (Moscow State University imeni M.V. Lomonosov, Laboratory of Adsorption)  
Institut fizicheskoy khimii AN SSSR, Laboratoriya sorbtsionnykh protsessov (Institute of Physical Chemistry of the Academy of Sciences of the USSR Laboratory of Sorption Processes)

Card 4/5

S/069/61/023/002/002/008  
B101/B208

AUTHORS: Kiselev, A. V. and Khrapova, Ye. V.

TITLE: Approximate expression for the wave-like isotherms of nitrogen adsorption on graphitized carbon black, considering adsorbate-adsorbate interaction in the first and second layers

PERIODICAL: Kolloidnyy zhurnal, v. 23, no. 2, 1961, 163-169

TEXT: It was shown in previous papers (Ref. 1: Kolloidn. zh., 19, 572, 1957; Ref. 2: ibid., 20, 444, 1958) that the adsorption isotherm of vapors, particularly of nitrogen, begins with a concave section owing to adsorbate-adsorbate interaction. For the first section of the prevalent occupation of the monolayer, the following equation is written:

$h = \theta/K_1(1 - \theta)(1 + K_n\theta)$  (1), while the approximate equation

$h = \theta(1 - h)^2/K_1[1 - \theta(1 - h)][1 + K_n\theta(1 - h)]$  (2) holds for the transi-

tion to the adsorption of the second layer.  $h$  denotes the relative pressure,  $\theta$  the total degree of surface occupation,  $K_1$  the equilibrium constant for the adsorbate-adsorbent interaction, and  $K_n$  the equilibrium constant for the

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Approximate expression ...

S/069/61/023/002/002/008  
B101/B208

adsorbate-adsorbate interaction. The authors studied the adsorption of nitrogen vapor in a wide range of  $\theta$ , and tried to obtain a better approximation of equation (2) to the wave-like course of the adsorption isotherm. Adsorption of  $N_2$  was performed at  $-195^\circ\text{C}$  on Soviet T-1 (T-1) carbon black (annealed at  $3000^\circ\text{C}$ ; specific surface  $s = 28.1 \text{ m}^2/\text{g}$ ), and T-2 (T-2) ( $3200^\circ\text{C}$ ,  $s = 6.9 \text{ m}^2/\text{g}$ ) by means of an apparatus which has already been described by the authors (Ref. 15: Izv. AN SSSR, Otd. khim. n., 1958, 390). Fig. 1 gives the results and compares them with those obtained by S. Ross, W. Winkler (Ref. 3, see below), and S. Ross, W. W. Pultz (Ref. 4, see below). The waves of the isotherm of successive occupation of the black surface first with the monomolecular nitrogen layer and then with the following layers are given by  $\theta'' = (\alpha - \alpha_m)/\alpha_m$ , where  $\alpha_m = 10.2_5 \text{ } \mu\text{mole}/\text{m}^2$ , is the occupation of the monomolecular layer;  $\theta''' = (\alpha - \alpha_2)/\alpha_m$  with  $\alpha_2 = 18.0 \text{ } \mu\text{mole}/\text{m}^2$  is the occupation of the second layer. These parts of the isotherm are expressed by Eq. (2) if for each part another value of the constants is taken. This is shown in Fig. 4. The constants thus calculated are presented in Table 2. Fig. 5 shows that agreement was brought about between calculation and experimental data by substituting the various values for the constants of

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Approximate expression ...

S/069/61/023/002/002/008  
B101/B208

the individual sections. There are 5 figures, 2 tables, and 19 references: 8 Soviet-bloc and 11 non-Soviet-bloc. The 3 references to English-language publications read as follows: Ref. 3: S. Ross, W. Winkler, J. Colloid. Sci., 10, 319, 1955; Ref. 4: S. Ross, W. W. Pultz, J. Colloid. Sci., 13, 397, 1958; Ref. 12: G. D. Halsey, J. Amer. Chem. Soc., 74, 1082, 1952.

ASSOCIATION: Moskovskiy universitet, Khimicheskii fakul'tet, Laboratoriya adsorptsii (Moscow University, Chemical Division, Laboratory of Adsorption).

SUBMITTED: October 7, 1959

Card 3/6  
3



KHRAPOVA, Ye. V.; KISELEV, A. V.; PETROVA, R. S.;  
SHCHERBAKOVA, K. D.; VASIL'YEVA, V. S.

"The physico-chemical characteristics of the adsorption process  
at phase boundaries through gas chromatography"  
Report to be submitted for the Fourth International Symposium  
on Gas Chromatography, Hamburg, West Germany, 13-16 June 1962.

Chemical Faculty, University of Moscow

KISILEV, A.V.; KHRENOVA, Ye.V.; SHEMERBAKOVA, K.D.

Chromatographic determination of the heat of the adsorption of  
lower hydrocarbons on 5A zeolites. Neftekhimiia 2 no.6:877-884  
N-D '62. (HRA 17:10)

1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta  
im. Lomonosova, laboratoriya adsorbtsii i gazovoy khromatografii.

KHRAPOVITSKAYA, G.Ye.

A case of collision in a problem of three bodies. Biul.Inst.teor.  
astron. 5 no.7:435-444 '53. (MLRA 7:5)  
(Problem of three bodies)

KHRAPOVITSKAYA, M.K., red.; MOISEYEV, I.N., red.; VOLKOV, N.V.,  
tekh. red.

[Hydrological yearbook] Gidrologicheskii ezhegodnik. Leningrad, Gidrometsizdat. 1957. Vol.6. [Basin of the Kara Sea (western part)] Bassein Karskogo moria (zapadnaia chast') Nos.0-3. [Ob' River and its basin to the estuary of the Irtysh River] Reka Ob' i ee bassein do ust'ia r. Irtysha. Pod red. M.K.Khrapovitskoi. 1962. 325 p.  
(MIRA 16:12)

(Ob' Valley--Hydrology--Tables, calculations, etc.)

*KHRAPOVITSKIY, A.*

COUNTRY	: USSR	T
CATEGORY	: Human and Animal Physiology, Sensory Organs	
ABST. JOUR.	: RZhBiol., No. 5 1959, No. 22578	
AUTHOR	: Varshavskiy, L.; Khrapovitskiy, A.	
INST.	: Academy of Sciences, USSR	
TITLE	: Masking Associated with Various Sounds and Noises.	
ORIG. PUB.	: V sb.: Vospriyatiye zvukovykh signalov v razlich. akust. usloviyakh. M., AN SSSR, 1956, 160--175	
ABSTRACT	: No abstract	

Card: 1/1

L 47148-66 EWT(1)/EWP(m) WW

ACC NR: AR6000706

SOURCE CODE: UR/0124/65/000/009/B039/B039

AUTHORS: Korzavin, G. N.; Khrapovitskiy, V. G.

72

TITLE: Flow of a supersonic gas stream over a symmetric profile

B

SOURCE: Ref. zh. Mekhanika, Abs. 9B254

REF SOURCE: Dokl. 3-y Sibirsk. konferentsii po matem. i mekhan., 1964, Tomsk, Tomskiy un-t, 1964, 318-319

TOPIC TAGS: gas flow, supersonic flow, shock wave, differential equation, approximation method

ABSTRACT: The shape of the detached shock wave and the flow parameters behind the / shock wave are determined for the flow over a given symmetric profile in a supersonic inviscid gas stream. A second order nonlinear differential equation is obtained for the stream function. The solution of the equation is obtained in series form. The boundary conditions are given on the body, on the axis of symmetry, and on the shock wave, whose equation is known. The shock standoff distance from the body is determined. A. F. Kryuchin [Translation of abstract]

SUB CODE: 20

Card 1/1 afs

KHRAPOVITSKIY, Yu. S.

KHRAPOVITSKIY, Yu. S. "Investigation of Liquid Shock Absorbers." Min Higher Education USSR. Moscow Order of Lenin Aviation Institute imeni Sergo Ordzhonikidze. Moscow, 1956.  
(Dissertation for the Degree of Candidate in Technical Science)

So: Knizhnaya Letopis', N. 18, 1956.

PEREVERTKIN, S.M.; KHRAPOVITSKIY, Yu.S., kand.tekhn.nauk; TSIKLIS, D.S.,  
doktor khim.nauk

Compressibility of some liquids at high pressures. Trudy GIAP  
no.7:26-32 '57. (MIRA 12:9)  
(Liquids) (Compressibility)



KHARAPOVITSKIY, Yu. S.

PHASE I BOOK EXPLOITATION

80V/4026

SOV/11-M-117

Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze

Issledovaniya v oblasti samoletnykh gidravlicheskh ustroystv; sbornik statey (Research in the Field of Aircraft Hydraulic Devices; Collection of Articles) Moscow, Oborongiz, 1959. 101 p. (Series: Its: Trudy, vyp. 117) Errata slip inserted. 2,650 copies printed.

Sponsoring Agency: REPSR. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya.

Ed.: Blandov, Candidate of Technical Sciences, Docent; Ed. of Publishing House: V. M. Tokar'; Tech. Ed.: V. P. Rozhin; Managing Ed.: A. S. Zaymovskaya, Engineer.

**PURPOSE:** This collection of articles is intended for scientific workers and engineers concerned with aircraft hydraulic devices. It may also be of use to students of advanced courses in related subjects.

**COVERAGE:** The articles in this collection present theoretical and experimental research on aircraft hydraulic devices. The following

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Research in the Field of Aircraft (Cont.)

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topics are discussed: design of fluid shock absorbers, influence of low temperature on the performance of rubber packings in hydraulic aggregates, statics and dynamics of hydraulic conduit volume regulation, and methods of determining viscosity of liquids containing diffused air. This monograph is the first to be published on a subject basis by the Department of Aircraft Equipment of MAI (Moscow Aviation Institute). The authors are young scientists of the Institute and industry. No personalities are mentioned. There are references at the end of each article.

TABLE OF CONTENTS:

Foreword	3
<u>Khrapovitskiy, Yu. S. [Candidate of Technical Sciences]. Investigation of Liquid Shock Absorbers</u>	5
Nosov, Yu. A. [Engineer]. Influence of Low Temperatures on Performance of Packings	40
Card 2/3	

Research in the Field of Aircraft (Cont.)

SOV/4026

Gamynin, N. S. [Candidate of Technical Sciences]. Equation of Motion  
and Frequency Characteristics of a Hydraulic Conduit With Volume  
Regulation

60

Reshetnikova, A. D. [Candidate of Technical Sciences]. Determining the  
Viscosity of a Fluid in Which Air Has Been Diffused

82

AVAILABLE: Library of Congress

Card 3/3

AC/RW/ec  
7-27-60

KHRAPOVITSKIY, Yu.S., kand.tekhn.nauk

Investigating liquid dampers. Trudy MAI no.117:5-39 '59.  
(MIRA 13:6)

(Shock absorbers)

KHRAPOVSKIY, A. I.

A. P. Musakin, A. I. Khrapovskiy, S. P. Shaykind, et al, Zadachnik po kolichestvennomu analizu (Manual of Problems in Quantitative Analysis). Second Edition, revised and supplemented. Goskhimizdat.

The manual contains problems for a course in quantitative analysis, conforming to the analytical chemistry program of chemical technology institutes.

The manual is intended for chemical technology students of advanced training institutions.

SO: Sovetskije knigi (Soviet Books), No. 186, 1953, Moscow, (U-6472)

KHRAPOVSKIY, A. (Leningrad).

Some reactions for study in a chemistry club. Khim. v shkole no.3:68-71  
My-Je '53.

(MLBA 6:7)

(Chemistry--Study and teaching)

KHRAPOVSKIY, A.

Wh/ discovered rhenium? Tekh. molod. 21 no.6:38 Je '53. (MLRA 6:6)  
(Rhenium)

KHRAPOVSKIY, A., inzhener-tekhnolog.

Why so much soda? Znan. sila 32 no.5:29 My '57.  
(Soda industry)

(MLRA 10:9)



KHRAPPO, N.S.; CHUDNOVSKIY, V.S.

Data on electroencephalographic studies in Menière's disease and central cochleovestibular syndrome. Vest. otorin. 25 no.5: 21-26 S.-O. '63. (MIRA 17:4)

1. Iz otorinolaringologicheskoy kafedry (zav. - prof. I.P.Soldatov) i kafedry psikhiiatrii (zav. - prof. P.F.Malkin) Kuybyshevskogo meditsinskogo instituta.

KHRAFFO, N.S.

Otoneurological studies in brain tumors. Vest.otorin. 22  
no.3:83-88 My-Je '60. (MIRA 13:10)  
(BRAIN-TUMORS)

KHRAPPO, N.S., ordinator

Aneurysm of the posterior inferior cerebellar artery simulating  
a neurinoma of the acoustic nerve. Vest. otorin. 22 no.1:85-86  
Ja-F '60. (MIRA 14:5)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. B.N.Lukov)  
Kuybyshevskogo meditsinskogo instituta.  
(ANEURYSMS) (BRAIN—BLOOD SUPPLY)

GRIGOR'YAN, R.A.; LEBEDEV, O.T.; KHRAPTSOVA, K.N.

Two-channel electronic stimulator for physiological research.  
Biofizika 7 no.6:727-730 '62. (MIRA 17:1)

1. Institut evolyutsionnoy fiziologii im. I.M. Sechenova  
AN SSSR, Leningrad.

KHRAFUNOV, G. S.

34034. SLOBODKIN, G. I. KHRAFUNOV, G. S. - Regulirovanie skorosti  
priyediknykh mashin, tekstil. prom-st' 1949, No. 10, C. 36-37

SO: Letopis' Zhurnal'nykh Statey, Vol. 42, Moskva, 1949

KHRAPOV, G. S.

USSR/Chemistry - Automatic control

FD-508

Card 1/1 : Pub. 50-7/23

Authors : Ikhlov, I. A., Vasil'yev, V. V., and Khrapanov, G. S.

Title : Automatic regulation of the neutralization process in the production of ammonium nitrate.

Periodical : Khim. prom., 286-289 (30-33), Jul/Aug 1954.

Abstract : Describe automatic control procedures applied at USSR industrial plants in the neutralization of ammonia with nitric acid. Two graphs, 4 figures.

Institution :

Submitted :

*KHRAPUNOV, G. S.*

S/064/60/000/004/006/006  
B015/B060

AUTHORS: Brushteyn, A. I., Khrapunov, G. S.

TITLE: On the Performance of Neutralizers in Ammonium Nitrate Production

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 4, pp. 69-72


TEXT: The above subject is illustrated, and some types of neutralizers of ammonium nitrate production (Figs. 1,2) are compared. It is noted that in apparatuses of the types MTP (ITR) and MTH-2 (ITN-2) unlike those of the types MTH (ITN) and MTH -1 (ITN-1) a circulation of ammonium nitrate lye is attained, which constitutes an advantage of these types. This advantage is confirmed by comparative tests conducted at the Stalinogorskiy khimicheskiy kombinat (Stalinogorsk Chemical Kombinat) (Figs. 3,4, Diagrams). The highest efficiency of the apparatuses of the type ITN-2 was attained at the Lisichanskiy khimicheskiy kombinat (Lisichansk Chemical Kombinat), as well as at the Kemerovskiye azotnotukovyy zavod (Kemerovo Nitrogen Fertilizer Works). Particularly

Card 1/2

On the Performance of Neutralizers in  
Ammonium Nitrate Production

S/064/60/000/004/006/006  
B015/B060

high material losses were observed at the Chirchikskiy elektrokhimicheskiy kombinat (Chirchik Electrochemical Kombinat). In the authors' opinion, the reason is to be found in an inadequate regulation of the neutralization process and in some flaws in the construction of neutralizers. Since experiments made over several years revealed that the automation of the neutralization process worked out by the Lisichanskiy filial OKBA (Lisichansk Branch of the OKBA) is efficient and reliable, this automation is described, and it is recommended to introduce it in all factories, since, apart from the works of the Stalinogorsk, Lisichansk, Chirchik Kombinats and the Gorlovskiy azotnotukovyy zavod (Gorlovka Nitrogen Fertilizer Works), neutralization is controlled by hand. There are 4 figures and 1 Soviet reference.



Card 2/2



BRUSHTEYN, A.I.; KHRAPUNOV, G.S.

Action of neutralizers in the production of ammonium  
nitrate. Khim.prom. no.4:333-336 Je '60.

(MIRA 13:8)

(Ammonium nitrate)

KHRAPUNOV, L.; NADEZHGIN, G.

Tubeless tires for motortrucks. Avt.transp. 39 no.3:39-42 Mr '61.  
(MIRA 14:3)

(Motortrucks---Tires)

KHRAPUNOV, L.G.

Causes of the appearance and ways for eliminating the "air bubble  
under thread" defect of tire casings. Kauch.i rez. 20 no.5:46-48  
My '61. (MIRA 14:5)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Tires, Rubber)

KHRAPUNOV, L.G.

Using cords of equal density in automobile tires. Khim.volok.  
no.3:35-37 '61. (MIRA 14:6)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Tire fabrics)

KHRAPUNOV, L.G.

Effect of rubber content of automobile tires on their performance.  
Kauch. i rez. 20 no.11:28-31 N '61. (MIRA 15:1)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Automobiles--Tires)

KHRAPUNOV, L.G.; NADEZHDIN, G.V.

Analyzing the weight of motor-vehicle tires and wheels. Avt.prom.  
27 no.11:23-25 N '61. (MIRA 14:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Motor vehicles--Wheels)

KHRAPUNOV, L.G.

Improving the performance of tubeless tires for trucks. Kauch.i  
rez. 21 no.2:26-28 F '62. (MIRA 15:2)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Motortrucks--Tires)

DESIDLEY, L.V.; KHRAPUNOV, L.G.

Effect of some design parameters of the tread on the efficiency  
of tires. Kauch.i rez. 21 no.3:30-35 Mr '62. (MIRA 15:4)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Tires, Rubber—Testing)



KHRAPUNOV, L. G.; NAREZHDI, G. V.

Safe driving with tubeless tires. Avt. prom. 29 no.5:34-35  
My '63. (MIRA 16:4)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

(Motor vehicles—Tires)

DESIDLEY, L.V.; KURAPUNOV, I.G.; REKITAR, M.I.

Tires with a reduced number of plies. Kauch. i rez. 23 no.12:30-31  
D ' 4. (MIRA 18:2)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

KHRAPUNOV, L.G.; NADEZHIDIN, G.V.

Thermal state of tubeless tires of motortrucks. Avt.prom. 30  
no.2:26-27 F '64. (MIRA 17:4)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

KHRAPUNOV, N. I.

KHRAPUNOV, N. I.: "Some Features of Vegetable Growing on the South Shore of the Crimea." Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. Moscow, 1956. (Dissertation for the Degree of Candidate in Agricultural Science)

So: Knizhnaya Letopis', No. 18, 1956

KHRAPUNOV, Ye.L.

Eliminate the lag in the rural telephone program. Vest. svyazi 20  
no.10:7-8 0 '60. (MIRA 13:11)

1. Starshiy inzhener Upravleniya mestnoy telefonnoy svyazi i radio-  
fikatsii Ministerstva svyazi SSSR.  
(Telephone)

*Khrapunova, N.V.*  
GIL'MAN, A.G.; KHRAPUNOVA, N.V.; SHIFMAN, N.D.

First results of application of streptomycin in surgery of  
pulmonary tuberculosis. Probl. tuberk., Moskva no.4:54-59  
July-Aug 1951. (CJML 21:1)

1. Of the Second Surgical Clinic (Head -- Doctor Medical  
Sciences A. G. Gil'man), Institute of Climatotherapy of  
Tuberculosis (Director -- Docent Ye. D. Petrov), Yalta.

KHRAPUNOVA, N.V. (Simferopol', ul. Frunze, d. 30, kv.7); BUTYLIN, Yu.P.  
(Simferopol').

Simultaneous bilateral lung resection for tuberculosis in a  
patient with mitral stenosis. Grudn. khir. 5 no.4:93-94 J1-Ag'63  
(MIRA 17:1)

AFANAS'YEV, A.P.; ANUCHIN, V.G.; VINOGRADOV, K.V.; GARANINA, M.M.;  
GILEROVICH, M.M.; DUBROVSKIY, Ye.P.; YEVSTIGNEYEV, A.A.; IOKHVIN,  
M.R.; KALMYKOV, P.M.; KRENGEL', I.TS.; LOSEV, I.G.; MAYEVSKIY,  
F.M.; MAZEL', S.I.; MIZHERITSKIY, G.S.; NOVIKOV, M.I.; NAZAR'YEV,  
O.V.; PCHELKINA, I.A.; RAZUMOV, V.S.; ROZENBLYUM, I.M.; SEROV, B.P.;  
SKRYPNIK, T.I.; SAL'VIN, Ye.S.; SMOTRINA, V.F.; TELEPNEVA, N.S.;  
FIL'CHAKOV, N.I.; KHRAPUNOVA, Ye.L.; UNDEVICH, G.S.; UR'T'YEV, P.P.;  
SHILOV, A.A.; SHLYKOV, A.P.; KIRILLOV, L.M., red.; MAEKUCH, M.G.,  
tekhn.red.

[Regulations on the construction of municipal telephone network lines]  
Pravila po stroitel'stvu lineinykh sooruzhenii gorodskikh telefonnykh  
setei. 2.izd. Moskva, Sviaz'izdat, 1962. 511 p. (MIRA 15:5)

1. Russia (1923- U.S.S.R.) Ministerstvo svyazi. Glavnoye upravleniye  
kapital'nogo stroitel'stva.  
(Telephone lines)



KHRAPUNOVICH, M.V., inzhener.

Precast window heads made of seven-slotted ceramic blocks. Hsts. 1  
izobr.predl.v stroi. no.130:9-10 '56. (MLRA 9:9)  
(Windows)

*SKVORTSOV, N.B.*  
ZOTOV, Yu.P., inzhener; ISAYENKO, N.B., inzhener; SKVORTSOV, .SP., inzhener;  
Khrapunovich, B.B., inzhener;

Making and assembling large brick blocks with ceramic facings. [Suggested  
by IU.P.Zotov and others] Mats: 1 izobr. predl.v stroi. no.151:15-19  
'56. (MIRA 10:3)

(Building blocks) (Ceramics)

KHRAFUNOVICH, N.M., inzh. (Voronezh)

On the Southeastern Railroad. Put' 1 put.khoz. 8 no.12:32 '64.  
(MIRA 18:1)

KHRAPYLIN, A.

Improve the designs and assembling of sprinkler units. Posh.delo 3  
No.6:19 Je '57. (MIRA 10:7)

(Fire sprinklers)